## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:

Hart et al.

Serial No.:

10/559,758

Filed:

March 3, 2006

Entitled:

PEPTIDE LIGANDS

EXAMINER: C. Bradley

ART UNIT: 1654

Atty. Docket No.: ABL-012.1P US

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

## APPLICANTS' EXAMINER-INITIATED INVERVIEW SUMMARY

Sir:

Applicants' attorney was contacted by Examiner Bradley on January 22, 2010 to discuss amendments to the claims that the Examiner indicated would place the application in condition for allowance.

The substance of that interview is summarized below.

The Commissioner is hereby authorized to charge any fees associated with the submission of this document to Deposit Account No. 50-0268.

### **REMARKS**

The present invention is related to the discovery that peptides comprising the structural motif, PX<sup>1</sup>X<sup>2</sup>X<sup>3</sup>T, bind specifically and with high affinity to receptors on the surface of dendritic cells.

#### Background

In an Office Action mailed July 21, 2009, the Examiner alleged that the application contained claims directed to more than one species of a generic invention and that these species

were deemed to lack unity of invention because they were not so linked as to form a single general inventive concept under PCT Rule 13.1. According to the Examiner,

"[T]he species lack the same or corresponding special technical features for the following reasons: no common structure is present (i.e. there is not a significant structural element shared by all of the alternatives). Therefore, unity of invention is lacking a priori". (See, Office Action, page 3.)

As such, the Examiner required Applicants to elect one of the following peptide species for examination:

PALKT [SEQ ID NO: 6], PSNST [SEQ ID NO: 8], PPNTT [SEQ ID NO: 9], STPPNTT [SEQ ID NO: 17], APSNSTA [SEQ ID NO: 15], and SPALKTV [SEQ ID NO: 16].

In response, Applicants elected, with traverse, PSNST [SEQ ID NO: 8] and indicated the claims reading on the elected species were Claims 1, 2, 12, 13, 32, 35, 42, 51, 54, 65, 76, 80, 84, 97-101, 105-107, 110, and 111.

#### Interview Summary

On January 22, 2010, Applicants' attorney was contacted by Examiner Bradley to discuss possible claim amendments that would put the application in condition for allowance. Examiner Bradley indicated that a search of the art had been conducted and a number of references were found that supposedly read on the subject matter of Claims 1, 2, 13, and 32. Claim 1 of the present application is directed to a peptide having the structural motif: PX<sup>1</sup>X<sup>2</sup>X<sup>3</sup>T [SEQ ID NO: 1] and Claims 2, 13, and 32, which depend from Claims 1, 2, and 2, respectively, are directed to amino acid variations at the X<sup>1</sup>, X<sup>2</sup>, and X<sup>3</sup> positions of SEQ ID NO: 1.

The Examiner also indicated that the pentamer and heptamer peptides recited in Claim 12 (which also depends from Claim 1), namely PALKT [SEQ ID NO: 6], PSNST [SEQ ID NO: 8], PPNTT [SEQ ID NO: 9], STPPNTT [SEQ ID NO: 17], APSNSTA [SEQ ID NO: 15], and SPALKTV [SEQ ID NO: 16], appeared to be free of the art.

Therefore, the Examiner proposed canceling Claims 1, 2, 13, and 32 and amending Claim 12 to independent form but limiting the claim to a peptide selected from the group "consisting of" PALKT [SEQ ID NO: 6], PSNST [SEQ ID NO: 8], PPNTT [SEQ ID NO: 9], STPPNTT [SEQ ID NO: 17], APSNSTA [SEQ ID NO: 15], and SPALKTV [SEQ ID NO: 16]

Applicants' attorney contacted Examiner Bradley the same day and inquired as to whether it would be acceptable to amend Claim 12 to recite "a peptide comprising a peptide having the amino acid sequence selected from the group consisting of PALKT [SEQ ID NO:6]...

. etc., in order to cover additional amino acids "upstream" and "downstream" from these preferred peptide embodiments and thereby prevent a third party from infringing the patent by merely adding one amino acid to any of the claimed peptides. The Examiner indicated that this language would not be acceptable.

At the conclusion of the interview, no agreement was reached.

On January 28, 2010, Examiner Bradley faxed a proposed set of claims with amendments that would put the application in condition for allowance. The proposed claim set canceled Claims 1, 2, 13, 32, 84, 106, 107, and 110. The claim set included the amendment to Claim 12 as described above. Independent Claims 51, 65, and 80, directed to non-viral transfection mixtures and Claim 105, directed to a kit, all of which recite the peptide structural motif of SEQ ID NO: 1, were amended to delete the reference to SEQ ID NO: 1 and substituted with "a peptide with a length up to 30 amino acids comprising an amino acid sequence selected from the group consisting of, PSNST [SEQ ID NO: 8], PPNTT [SEQ ID NO: 9], STPPNTT [SEQ ID NO: 17], APSNSTA [SEQ ID NO: 15], and SPALKTV [SEQ ID NO: 16] or a peptide consisting of PALKT [SEQ ID NO: 6]" (emphasis added).

After discussing the matter with the client, Applicants' attorney contacted Examiner Bradley to inquire whether SEQ ID NO: 6 could be included with the peptides "from the group consisting of", which the client would find acceptable. The Examiner indicated that, due to the art that supposedly disclosed this peptide, any claims reciting SEQ ID NO: 6 would have to be limited to the peptide "consisting of PALKT".

At the conclusion of the interview, no agreement was reached and Applicants' attorney requested an Office Action be issued.

On February 23, 2010, the Examiner issued second Restriction Requirement dividing the claims into 16 groups and supplying citations of the prior art alleged to affect the common inventive concept running through all claims.

Respectfully submitted,

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The undersigned hereby certifies that this correspondence and accompanying documents are being electronically submitted to the U.S. Patent Office on <u>June 23, 2010</u>.

/David G. O'Brien/